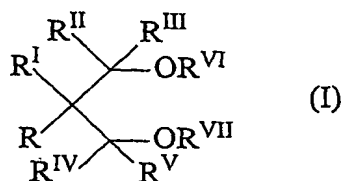


CLAIMS

1. A $\text{MgCl}_2 \cdot (\text{EtOH})_m (\text{ROH})_n (\text{H}_2\text{O})_p$ adduct in which R is a C1-C15 hydrocarbon group different from ethyl, optionally substituted with heteroatoms containing groups, n and m are indexes, higher than 0, satisfying the equations $(n+m) \geq 0.7$ and $0.05 \leq n/(n+m) \leq 0.95$ and p is a number ranging from 0 to 0.7 with the proviso that when R is methyl and $(n+m)$ is in the range of 0.7 to 1, the value of $n/(n+m)$ ranges from 0.05 to 0.45.
2. The adduct according to claim 1 characterized by the fact that $(n+m)$ is higher than 1.
3. The adduct according to claim 2 characterized by the fact that $(n+m)$ ranges from 2 to 5.
4. The adduct according to claim 1 characterized by the fact that the value $n/(n+m)$ ranges from 0.1 to 0.4
5. The adduct according to claim 4 characterized by the fact that the value $n/(n+m)$ ranges from 0.15 to 0.35.
6. The adduct according to claim 1 characterized by the fact that the index p ranges from 0.01 to 0.6.
7. The adduct according to claim 6 characterized by the fact that the index p ranges from 0.01 to 0.4.
8. The adduct according to claim 1 characterized by the fact that R groups are methyl or C3-C10 saturated hydrocarbon groups.
9. The adduct according to claim 1 characterized by the fact that the ROH alcohols are selected from the group consisting of methanol, propanol, isopropanol, butanol, sec-butanol, tert-butanol, pentanol, 2-methyl-1-pentanol 2-ethyl-1-hexanol phenol, 4-methyl-1-phenol, 2,6-dimethyl-1-phenol, cyclohexanol, cyclopentanol.
10. The adduct according to claim 9 characterized by the fact that the ROH alcohol is methanol.
11. A catalyst component for the polymerization of olefins comprising the product obtained by contacting a transition metal compound of groups 4 to 6 of the Periodic Table of Elements (new notation) with an adduct according to anyone of the preceding claims.
12. The catalyst component according to claim 11 in which the transition metal is selected from titanium compounds of formula $\text{Ti}(\text{OR})_n \text{X}_{y-n}$ in which n is comprised between 0 and y; y is the valence of titanium; X is halogen and R is an alkyl radical having 1-8 carbon atoms or a COR group.
13. The catalyst component according to claim 12 in which the titanium compound is

selected from TiCl_3 , TiCl_4 , $\text{Ti}(\text{OBu})_4$, $\text{Ti}(\text{OBu})\text{Cl}_3$, $\text{Ti}(\text{OBu})_2\text{Cl}_2$, $\text{Ti}(\text{OBu})_3\text{Cl}$.

14. The catalyst component according to claim 11 which further contains an electron donor compound.
15. The catalyst component according to claim 14 in which the electron donor is selected from the alkyl or aryl esters of mono or polycarboxylic acids.
16. The catalyst component according to claim 14 in which the electron donor is selected from 1,3 diethers of the formula:



wherein R, R^{I} , R^{II} , R^{III} , R^{IV} and R^{V} equal or different to each other, are hydrogen or hydrocarbon radicals having from 1 to 18 carbon atoms, and R^{VI} and R^{VII} , equal or different from each other, have the same meaning of $\text{R}-\text{R}^{\text{V}}$ except that they cannot be hydrogen; one or more of the $\text{R}-\text{R}^{\text{VII}}$ groups can be linked to form a cycle.

17. The catalyst component for the polymerization of olefins according to claim 11 characterized by the fact that before being contacted with the transition metal compound, the adduct is subject to a dealcoholation treatment.
18. Catalyst for the polymerization of olefins comprising the product obtained by contacting a catalyst component according to one of the claims 11 to 17, and an aluminum alkyl compound.
19. The catalyst for the polymerization of olefins according to claim 18 in which the aluminum compound is an Al-trialkyl compound.
20. The catalyst for the polymerization of olefins according to claim 19 further comprising an external donor.
21. The catalyst for the polymerization of olefins according to claim 20 in which the external donor is selected from the silane compounds containing at least a Si-OR link, having the formula $\text{R}_a^1\text{R}_b^2\text{Si}(\text{OR}^3)_c$, where a and b are integer from 0 to 2, c is an integer from 1 to 3 and the sum (a+b+c) is 4; R^1 , R^2 , and R^3 , are alkyl, cycloalkyl or aryl radicals with 1-18 carbon atoms.

22. Process for the polymerization of olefins of formula $\text{CH}_2=\text{CHR}$, in which R is hydrogen or a hydrocarbon radical having 1-12 carbon atoms, carried out in the presence of a catalyst according to one of the claims 18-21.